LACKS: 7, 9, 16, 18

ANTHONY D. CORTESE Sc. D
Commissioner

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

Department of Environmental Quality Engineering

100 Cambridge Street, Boston 02202

MEMORANDUM

TO: Division Directors: Hagg, Hannon, McCracken, Cass, McMahon, Gaskell, Delaney
Regional Environmental Engineers: Joly, Anderson, McLoughlin and Iantosca

FROM: Commissioner Cortese A. Cortese

SUBJECT: Residuals Policy

DATE: July 15, 1980

Attached is the Department's policy concerning the regulation of the disposal and reuse of residuals. This policy is effective immediately.

This policy represents a major change in the way DEQE has implemented and interpreted the statutes used as a basis for regulation. Essentially, all distinctions between off-site and on-site disposal are being eliminated. Disposal of non-hazardous sludge generated by a sewage treatment plant, regardless of ownership, and of non-hazardous septage will be subject to DEQE regulation, but will not require site assignment. However, before determining how these materials are to be disposed of, I want local officials to be consulted and their comments considered. The disposal of all other sludge requires site assignment.

Resource use of hazardous sludge requires a DEQE license. Resource use of non-hazardous sludge shall be regulated like all other activities involving potential pollution of air, land, or water.

Division Directors should review all pertinent regulations for consistency with this policy and report recommended or necessary revisions to me by August 30. Existing regulations will continue to be effective until the new ones are promulgated.

The determination of whether a substance is hazardous or not should follow the procedure to be set forth by the Division of Hazardous Waste. In the interim, EPA's procedure will be applicable. Questions concerning this procedure should be directed to Bill Cass.

ADC/FN/sl

ANTHONY D. CORTESE Sc. D
Commissioner

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Department of Environmental Quality Engineering
100 Cambridge Street, Boston 02202

Residuals Disposal and Reuse Policy

July 15, 1980

The use, storage and land and water disposal of sludge will be regulated in the future as stated below. In all cases, there is no distinction between on-site and off-site disposal.

I. Authority to Regulate Disposal

The following discussion applies to sludge disposal only. Resource use of sludge is discussed separately in the next section.

As used herein, the word "disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of waste into or on any land or water so that such waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

The disposal of any sludge or ash which meets the definition of hazardous waste shall be subject to the Hazardous Waste Management Act, General Laws, Chapter 21C, and the Massachusetts Hazardous Waste Facility Siting Act, General Laws, Chapter 21D. Such disposal must be licensed by this Department pursuant to G.L. c. 21C, §7, site assigned pursuant to G.L. c. 111, §150B, and be the subject of a siting agreement pursuant to G.L. c. 21D, §12. The only exceptions are that (1) if the disposal facility was licensed by the Division of Water Pollution Control prior to November 9, 1979, such facility is fully approved to do what its license authorizes so long as the license remains in effect (Stat. 1979 c. 704, §7.), and (2) if the disposal facility was lawfully in existence on May 1, 1980, such facility need not be the subject of a siting agreement (G.L. c. 21D, §18). Any facility falling within this exception is subject only to regulation by DEQE.

Non-hazardous sludge or ash generated by a municipal or industrial sewage treatment plant should be regarded as "sewage" within the meaning of G.L. c. 111, §150A. Therefore, the disposal of such sludge and ash is not subject to G.L. c. 111, §150A. Such disposal is subject to G.L. c.21, §§26-53, which authorizes the Division of Water Pollution Control to regulate such plants and G.L. c. 83, §7, which authorizes DEQE to order a sewage treatment plant to enlarge or improve its works or change its method of operation whenever DEQE determines that such action is necessary to prevent water pollution, a source of nuisance, or creation of objectionable results in the neighborhood because of defective construction, inadequate capacity or

negligence or inefficiency in maintenance or operation or other cause. Cities and towns may not interfere with or veto the sewage treatment plant owner's compliance with the order.

The disposal of non-hazardous sludge or ash generated by a drinking water treatment plant shall be subject to G.L. c. 111, §§5G, 17 and 160, which authorize DEQE to order municipalities and persons to provide and operate such facilities, to make any improvements relative to existing facilities which DEQE deems necessary to protect public health, and take whatever other action DEQE deems necessary to ensure the delivery of a fit and pure water supply to all consumers. Whenever DEQE orders a particular drinking water treatment plant to dispose of sludge or ash at a particular location, cities and towns may not interfere with or veto the water supplier's complying with the order. Because such sludge or ash is not "sewage", DEQE should not issue such an order until the plant operator has attempted to dispose of the sludge in compliance with G.L. c. 111, §150A.

The disposal of septage shall be regulated pursuant to G.L. c. 111, §31D, which authorizes DEQE to order a city, town, or sewerage district to provide whatever facilities DEQE deems necessary for adequate and proper disposal of septage collected for hire by private persons. Cities and towns may not interfere with or veto compliance with the order. Note that DEQE can regulate voluntary action taken by cities, towns and districts pursuant to G.L. c. 83, §6, which provides that such entities may not acquire land by purchase or eminent domain for the purpose of sewage disposal without the prior approval of DEQE.

The disposal of any other sludge or ash shall be regulated pursuant to G.L. c. 111, §150A.

II. Authority to Regulate Resource Use

The following discussion applies only to actual and intended use of sludge or ash as resources. If someone is using sludge or ash in a way that cannot be legitimately described as resource utilization, such use shall be treated as disposal of waste material.

The resource use of any sludge or ash which meets the definition of hazardous waste shall be subject to General Laws, Chapter 21C, which requires the "use" of hazardous waste, as well as the "disposal" of hazardous waste, to be licensed. Such resource use shall not be subject to General Laws, Chapter 21D, or Chapter 111, Section 150B, because those statutes deal only with "disposal", not "use", of hazardous waste. If such sludge or ash is treated so that it ceases to be hazardous, the untreated sludge or ash, and the treatment process and facility, are subject to these hazardous waste laws, but the treated and therefore non-hazardous sludge or ash is not subject to these hazardous waste laws.

Sludge or ash which is not hazardous may be a pollutant. DEQE has the authority to regulate the resource use of such sludge or ash so that such resource use does not cause pollution of the environment. This authority is found in G.L. c. 21, §27(12), authorizing DWPC to promulgate regulations to prevent water pollution and protect the quality and value of water resources; G.L. c. 111, §§142A-142J, authorizing DEQE to promulgate regulations to prevent pollution or contamination of the atmosphere; G.L. c. 111, §160, authorizing

DEQE to promulgate regulations to prevent pollution and secure the protection of waters used as sources of drinking water supply, and ensuring the delivery of a fit and pure water supply to all consumers; and G.L. c. 131, §40, prohibiting alteration of a wetland in a manner which will result in pollution or adverse impact on public or private water supply, ground water supply, or certain other stated interests (note that local Conservation Commissions have a major role in enforcing G.L. c. 131, §40).

These statutes give DEQE and DWPC the authority to prevent improper resource use of sludge or ash. These statutes do not give DEQE or DWPC the authority to order the use of sludge or ash as a resource. Anyone not wishing to use sludge or ash in a manner approved by DEQE has the option of disposing of it instead, provided that such disposal is in compliance with applicable law, as indicated in the previous section.

K. DISPOSAL OF SLUDGES AT SANITARY LANDFILLS:

1. Disposal of domestic wastewater and water treatment plant sludges may be authorized at approved sanitary landfills, provided that the sludge has been dewatered to 18-20% solids concentration and that the sludge is placed on the face of the landfill, adequately mixed with incoming refuse on a daily basis or more frequently as needed. Other methods may be used provided that they are previously approved by the Department.

4. A commercial sludge-only landfill (for disposal of non-hazardous sludge or sludge ash) or commercial sludge composting facility is subject to C 111, S 150 A because it is not an integral part of a wastewater treatment facility. Consequently, it is subject to site assignment by the local board of health.

FN/pb

MEMORANDUM

TO: Division Directors and Regional Environmental Engineers

FROM: Commissioner Cortese

DATE: August 11, 1982

SUBJECT: Sludge Disposal Policy

The following is a clarification of the Residual Policy of July 15, 1980:

1. Land application of non-hazardous sludge for beneficial purposes is not disposal and therefore not subject to C 111, S 150 A. The Department believes that the community should have input to such decisions and will seek local board of health concurrence before granting approval for a land application project.

2. Treatment and disposal of non-hazardous sludge or sludge ash on a site owned by a wastewater treatment facility is a part of the sewage treatment process and therefore falls under the statutory authority of C 21, § § 26-53, which authorizes the Division of Water Pollution Control to regulate such plants and C83, § 7, which authorizes DEQE to order a sewage treatment plant to enlarge or improve its works or change its method of operation in order to prevent or abate water pollution. Such treatment and disposal is not subject to site assignment by the board of health under C 111, S 150 A because it falls within the sewage exemption of C 111, S 150 A. The Department is nonetheless committed to providing opportunities for input to sludge disposal questions by boards of health as well as other local officials and citizens. Such opportunities occur throughout the project process beginning with facilities planning and up to the land taking. The public hearing on the land taking for a publicly owned wastewater treatment facility, held by the Department under the authority of C 83, S 6 provides a formal forum comparable to a site assignment hearing. The Division of Water Pollution Control has adopted a policy which spells out the procedure for assuring board of health participation under the Construction Grants process and through the C 83, S 6 hearing. A copy of that policy is attached to this memo.

3. Co-disposal of non-hazardous sludge or sludge ash with solid waste can only take place at a landfill which has been properly assigned by the local board of health and which has been approved by the Department. Disposal of sludge at a sanitary landfill should be authorized in accordance with Section K, 1 of The Policy and Procedure Manual for Solid Waste Program Acitvities, January 5, 1979 and as such is not considered special waste disposal:

Residuals Statutory Regulation Matrix

I Residuals Disposal

Material	Statute	
	On Site	Off Site
Sludge, sludge ash from publicly owned treatment works		
a. Non-hazardous	Ch. 21, §§26-53 Ch. 83, §7	Ch. 21, §§26-53 Ch. 83, §7
b. Hazardous	Chs. 21C, 21D Ch. 111, §150B	Chs. 21C, 21D Ch. 111, §150B
Sludge, sludge ash from privately owned domestic wastewater treatment works		
a. Non-hazardous	Ch. 21, §§26-53 Ch. 83, §7	Ch. 21, §§26-53 Ch. 83, §7
b. Hazardous	Chs. 21C, 21D Ch. 111, §150B	Chs. 21C, 21D Ch. 111, §150B
Industrial waste treatment works		
a. Non-hazardous	Ch. 21, §§26-53 Ch. 83, §7	Ch. 21, §§26-53 Ch. 83, §7
b. Hazardous	Chs. 21C, 21D Ch. 111, §150B	Chs. 21C, 21D Ch. 111, §150B
Septage	Ch. 111, §31(D)	Ch. 111, §31(D)
Water treatment plant sludges		
a. Non-hazardous	Ch. 111, §150A (Ch. 111, §5G, 17, 160, if necessary)	Ch. 111, §150A (Ch. 111, §5G, 17, 160, if necessary)
b. Hazardous	Chs. 21C, 21D Ch. 111, §150B	Chs. 21C, 21D Ch. 111, §150B
Coal ash	Ch. 111, §150A	Ch. 111, §150A
Oil ash	Ch. 111, §150A	Ch. 111, §150A
Incinerator ash		
a. Non-hazardous	Ch. 111, §150A	Ch. 111, §150A
b. Hazardous	Chs. 21C, 21D Ch. 111, §150B	Chs. 21C, 21D Ch. 111, §150B
Industrial ash		
a. Non-hazardous	Ch. 111, §150A	Ch. 111, §150A
b. Hazardous	Chs. 21C, 21D Ch. 111, §150B	Chs. 21C, 21D Ch. 111, §150B

II Resource Use of Residuals

Material	Statute
Non-hazardous	
1. Sludge, sludge ash from publicly owned treatment works	Ch. 21, §27(12); Ch. 111, §§142A-142J, 160; Ch. 131, §40
2. Sludge, sludge ash from privately owned treatment works-domestic and industrial	
3. Water Treatment Plant Sludge	
4. Coal ash, oil ash, incinerator ash, industrial ash	
5. Septage	Ch. 111, §31(D)
Hazardous - All Materials	Ch. 21C
Hazardous Material - Treatment Process to render material non-hazardous	Chs. 21C, 21D Ch. 111, §150B

ANTHONY D. CORTESE, Sc. D.
Commissioner

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs
Department of Environmental Quality Engineering
Division of Water Pollution Control
ONE Winter Street, Boston 021 08

April 27, 1982

M E M O R A N D U M

TO: Thomas F. McLoughlin

THRU: Bill Cass
Thomas C. McMahon
Fifi Nessen

FROM: Steven G. Lipman

SUBJECT: DEQE Position Pager Regarding Chapter 83 Section 6 Site Hearings and Coordination with Local Boards of Health

Prior to or concurrent with the award of a Step 2 design grant for a wastewater treatment facility, a Chapter 83 Section 6 Site hearing is held if the project includes any land purchase or eminent domain proceedings necessary for the construction of any treatment, purification or disposal works. The Public Meeting Law as specified in Chapter 30A Section 11C of the Massachusetts General Laws is utilized by DEQE for this hearing process. A hearing notice is published in the local newspaper(s) at least fourteen (14) days prior to the hearing date and all abuttors are informed in writing of the time and place of the hearing. The hearing is typically held at the pertinent DEQE Regional Office with representatives from the Division of Water Pollution Control and the community's consulting engineers normally in attendance.

On June 18, 1980 Commissioner Cortese issued a Memorandum detailing the Dept's Residuals Policy. Attachments #1 & 2 are matrices for Residuals Disposal and Resource Use of Residuals excerpted from this policy document.

This policy specified that the disposal of sludge and sludge ash from a Publicly Owned Treatment Works (POTW) are regulated under Chapter 83 unless the materials are deemed to be a hazardous waste. The Mass. Health Officers Association (MHOA) has stated their disagreement with this regulatory control of sludge disposal and is of the opinion that sludge disposal is specifically included in the language of Chapter 111 Section 150A. If this interpretation were to hold it would allow ultimate veto power by the local Board of Health (BOH) over POTW's. DEQE's position is that the Dept. has a statutory obligation to prevent water pollution and to assure the proper operation and function of wastewater treatment facilities;

that sewage sludge treatment and disposal is an integral part of the wastewater treatment process and to allow a local board or agency to exercise a veto power over that facet of the treatment process would abrogate our legislative mandate. The Department believes that it was never the Legislature's intent to grant localities veto power over the sludge disposal component of a POTW, therefore the exemption of sewage from Chapter 111 Section 150A. The Legislature has clearly granted to DEQE the responsibility for siting and operating POTWs through Sections 6 and 7 of Chapter 83.

In order to mitigate MHOA's apparent concern of not having adequate input into our Chapter 83 Section 6 hearing process, the following policy actions will be immediately instituted by the Dept.

1. The local BOH and contiguous BOH, if appropriate, will be notified in writing at least 14 days prior to an 83/6 hearing and will also receive copies of site plans, project descriptions, lists of abuttors and any other information deemed pertinent to the hearing.

2. The BOH will be specifically requested to participate in the hearing process and will be given 14 days after the hearing to comment on the proposal before a decision is made by the Dept.

3. All comments received by the Dept. at the hearing will be made available to the BOH.

4. Any written comments submitted by the BOH will be answered in writing by the Dept. prior to its taking any administrative action on the 83/6 siting.

This procedure will not only be followed for all future 83/6 land taking hearings but a similar procedure will be followed if any significant modifications to an existing POTW are being proposed. This would include but not be limited to the following:

1. addition of sludge incineration
2. addition of a sludge composting facility
3. addition of a sludge landfill
4. major expansion of the physical facilities which could adversely effect abuttors.

The intent of this policy revision is to assure the BOH and abuttors a formalized vehicle for reviewing and commenting on any significant change to a POTW.

Also indicated below is a brief description of the public participation and BOH coordination that already take place during the 201 Facilities Planning Process (prior to initiation of design work).

The Construction Grants 201 Facilities-Planning process contains a formalized public participation (PP) program which includes workshops, public meetings and a public hearing. All public meetings and hearings are advertised in the appropriate local newspapers and notices are sent to all individuals and agencies included on the project mailing list. This list is developed by the community's consultant, local PP Coordinator, &/or PP Advisory Group and includes all pertinent local, regional, state and federal Boards, Agencies and commissions along with all individuals who have either expressed an interest in the project or who have attended a previous project meeting.

Based upon the Division of Water Pollution Control's review of the Facilities Plan and associated documentation, the Division prepares an Environmental Assessment (Attachment #3 are typical examples) for the recommended alternative and this document is issued by the Environmental Protection Agency with a formalized thirty (30) day review period (Attachment #4 is a copy of our typical distribution list). It should be pointed out that the local Board of Health is always sent a copy of the Environmental Assessment and contiguous Boards of Health are also copied if deemed appropriate.

 Solid/Hazardous Waste Policy Number #8

IN REVISION 12/84

MEMORANDUM

TO: Division Staff, REEs, Deputy REEs for Air and Hazardous Waste Programs

FROM: William F. Cass, Director, DHW

DATE: September 14, 1982

SUBJECT: Designated Form for the Massachusetts Hazardous Waste Manifest

Introduction

The Division has received numerous questions on which hazardous waste manifest is required in Massachusetts under 310 CMR 30.000. The hazardous waste regulations at 310 CMR 30.312 state the form shall be prescribed by the Department and at 310 CMR 30.099, require that this form be used on and after October 1, 1982.

Policy

The prescribed manifest form is the New England Manifest. The manifest number should be pre-printed in the upper right hand corner by the firm producing the form. The form has seven numbered copies with instructions on the back of each page that explain where the copies should be sent or retained and list codes and definitions for properly filling out the form.

All information must be accurately and completely entered on the form. It is particularly important for the generator, transporter and facility to fill out the shaded areas, as this is the information required for the manifest tracking system to properly follow a shipment of hazardous waste from its point of origin to its delivery.

Implementation

The following companies distribute the New England manifest and should be contacted by firms needing the manifest:

1. Labelmaster, 7525 North Wolcott Avenue, Chicago, Ill. 60626, Attn: Becky Edwards, Manager, Governmental Affairs, Toll-free: 1-800-621-5808.

2. Certified Business Forms, 217 California St., Newton, MA 02158, Attn: John Pastuszak, (617) 969-0550.

Effective Date of Policy

The policy is effective immediately. As stated previously, use of the form is required on and after October 1, 1982. Any revisions to the policy will be clearly labeled as such. The Department has been following closely the development of a uniform national manifest form by the U.S. Environmental Protection Agency and the U.S. Department of Transportation. While such a form will facilitate interstate shipment of hazardous waste, final decisions have not yet been made on the format and directions for the form; its use is therefore premature.

WFC/LB/jm

MEMORANDUM

TO: DHW Staff

FROM: William F. Cass

DATE: January 11, 1982

SUBJECT: DHW Policy Memo : Interpretations of Phase I Regulations

The following policies have been adopted by this Division with respect to interpreting certain provisions of the Phase I regulations.

1. 30.340(1)(d)(2): This provision states that (large quantity) generators accumulating hazardous waste on-site for less than 90 days must prepare contingency plans in compliance with 30.520 through 30.524. 30.522 states that copies of the contingency plans must be sent to various agencies, including DEQE.

   Issue: Was 30.522 really intended to apply to generators who only accumulate for less than 90 days?

   Policy: Yes. All large quantity generators are required to prepare contingency plans. However, in order to reduce the paperwork burden on both the generator and the Department, a complete copy of the contingency plan need not be sent to DEQE. Rather, large quantity generators shall submit the following information to the appropriate DEQE regional Office:

   a) The name(s) of the emergency coordinator required by 310 CMR 30.521(7) and 30.521(8). This information must be updated promptly whenever the name(s) change. The submittal must include the addressess and phone numbers where the emergency coordinator(s) can be reached 24 hours a day.

   b) Evidence that the generator has made every reasonable attempt to contact and include local authorities in the contingency plan, in compliance with 310 CMR 30.521(5) and 30.521(6). The response to the generator by the local authorities, if any, shall be submitted to the Department.

This policy applies only to large quantity generators who accumulate hazardous waste for less than 90 days. It does not apply to licensees or to interim status TSDs.

2. 30.143(2): This provision exempts from the regulations "metallic wastes" which are to be recycled.

Issue: Does the term "metallic wastes" include metal bearing solutions from which the metal content is to be recovered?

Policy: No. When the regulations were written, this provision was intended to apply only to solid metal wastes, e.g., scrap metal. The recycling of other wastes will be addressed in the Phase II regulations.

3. 30.351(6): This provision states that when a small quantity generator accumulates more than 1,000 kg and therefore becomes a large quantity generator, all his accumulated waste is subject to all the provisions of 30.340 (on-site accumulation for large quantity generator up to 90 days).

Issue: If a generator, after having accumulated over 1,000 kg, reduces his accumulation to less than 1,000 kg, are the remaining wastes still subject to all provisions of 30.340?

Policy: Yes . EPA, on November 19, 1980, amended its small quantity generator provisions by stating that ".... all of those wastes for which the accumulations limit was exceeded are subject to regulation ...." (Part 261.5(f)); that is, such wastes are subject to EPA's large quantity generator regulations. In order for Massachusetts to not be less stringent, we are adopting the same approach.

4. 30.351(5): This provision states that a small quantity generator accumulating hazardous waste at the site of generation must comply with 30.340(1)(a) and (b). 30.340(1) mentions a 90 day limit for storage at the site of generation without a license.

Issue: Does the 90 day limit mentioned in 30.340(1) for accumulation without a storage license apply to small quantity generators?

Policy: No.

5. Does waste oil storage at a facility with interim status require a license, since waste oil is not a RCRA regulated waste?

Policy: No. However, the interim status standards should be applied to the waste oil storage portion of the facility.

6. 30.131: This section lists wastes from non-specific sources. It includes lists of specific solvents in various categories, F001 through F005.

Issue: F001 includes, for example, tetrachoroethylene and trichloroethylene. If these two solvents are mixed in a manufacturing process, and therefore the waste is a mixture of the two, is that mixture a F001 waste? Or, if a manufacturing process combines a F001 solvent with a F003 solvent, is the resulting mixed waste a regulated hazardous waste?

Comment: EPA has issued a policy, now being reconsidered, that each solvent listed in F001 through F005 must be in its pure form in order to be subject to regulations. Therefore, EPA would answer "no" to the above questions.

However, this approach creates a major loophole. Therefore, the Massachusetts policy is as follows:

Policy: Any mixture of any combination of listed hazardous wastes is to be regulated as a hazardous waste in Massachusetts.

7. 30.010 - Empty Container: This provision defines an empty container as one which either contains less than one inch of residue on the bottom, has been triple rinsed, or otherwise cleaned.

Issue: Does this definition apply to paper bags, and if so how?

Comment: No, it is not applicable. EPA has adopted a regulation which states that a container is empty if it contains less than 3% by weight of its original contents.

Policy: The 3% rule should apply to paper bags only pending a new regulation. Empty paper bags shall be handled in an environmentally sound manner.

8. 30.340(1) and (c): Neither of these provisions specifically require containers to be labelled when accumulation begins. Rather, they refer to provisions (30.322 and 30.323) which only require labelling "before" shipment off-site.

Issue: Should labelling be required at the time accumulation begins?

Policy: Yes. Good management practice dictates that hazardous wastes be properly identified from the time they are first generated. This reduces the likelihood of mixing incompatible wastes and allows both the generator and DEQE inspectors to keep track of the wastes as they are generated.

9. 30.353: This provision exempts "insignificant wastes" from these regulations.

Issue: If a person accepts hazardous waste from a generator of insignificant wastes (less than 20 kg per month), is the recipient an off-site TSD and therefore subject to the licensing requirements of 310 CMR 30.800?
Policy: No, a TSD license is not necessarily required. The following rules apply:

1. An insignificant quantity (less than 20 kg) may be delivered to another hazardous waste generator. The generator receiving the hazardous waste becomes responsible for its proper management, in accordance with the 310 CMR 30.000, including on-site accumulation, storage, manifesting, etc.

2. A person collecting insignificant quantities from a variety of generators must be a licensed transporter and must transport and deliver these hazardous wastes in accordance with the provisions of 310 CMR 30.000. For example, a person picking up 19 kg of hazardous waste at 6 locations must be a licensed transporter.

3. A person receiving insignificant quantities of hazardous waste from a variety of generators in separate, individual shipments becomes at least a small quantity generator by virtue of the fact that he has accumulated more than 20 kg at a particular point in time. For example, if 12 individuals separately deliver 19 kg of hazardous waste each to one person, that person receiving the hazardous waste is a small quantity generator.

JCC/jp

MEMORANDUM

Solid/Hazardous Waste Policy # 11

TO: Regional Environmental Engineers,
Deputy Regional Environmental Engineers for Solid/Hazardous Waste,
Division of Hazardous Waste Staff

FROM: William F. Cass, Director, DHW

DATE: February 7, 1983

SUBJECT: Interim Oil Ash Disposal Policy

Introduction

The Division of Hazardous Waste has received numerous requests from electric utilities and regional staff regarding the proper disposition of oil bottom ash and oil fly ash. The Department has for some time approved only lined sanitary landfills for the disposal of utility oil ash. This memorandum outlines and commits to paper the Department's de facto disposal policy for the disposal of oil ash in sanitary landfills. This is an interim policy, subject to change as new information on power plant ash becomes available.

Background

Several major utilities presently operating oil-fired electric generating units generate substantial volumes of oil bottom ash and oil fly ash. Certain Massachusetts electric generating stations, in particular, Salem Harbor, Canal Electric, and Brayton Point, often burn South American No.6 oil which contains high concentrations of vanadium. In the past, much of the ash from these plants has been delivered to vanadium recovery facilities located outside the New England region. Vanadium is used as a materials hardener in the steel industry; however, the industry is in a slump, and the domestic market for recoverable vanadium has collapsed.

New England Electric has identified and is investigating a vanadium recovery outlet for oil bottom ash, which can contain up to 36% vanadium, in Europe. At this writing, the company is sending the Salem Harbor Station oil fly ash to a lined disposal area in Amesbury. Brayton Point Station oil fly ash is landfilled on-site in a lined ash disposal facility. Boston Edison oil ash is landfilled at the lined Amesbury site, and the Department has approved both the Amesbury facility and a lined commercial landfill in Plainville for the disposal of oil ash from the Canal Electric Station in Sandwich.

With the vanadium recovery market severely depressed, and likely to remain so for some time, electric utilities may be forced to landfill large amounts of oil ash. Although oil ash is categorically exempt from state and federal hazardous waste regulations, the presence of vanadium pentoxide (V_2O_5), an EPA Appendix VIII hazardous constituent, should certainly be a factor in any Departmental decision on oil ash disposal. While V_2O_5 is a documented health hazard if inhaled, there appears to be a lack of data on the leachability of the compound from oil ash and the health effects of vanadium in drinking water. The issue is compounded by typical utility ash management practices, as power plant ash is often commingled with a variety of chemical cleaning solutions and corrosive demineralizer regenerants.

The State of Maine requires that oil ash be landfilled only at "secure" (lined) facilities. The Department has had a de facto lined landfill policy through its approvals of lined landfills exclusively for oil ash disposal. Until more definitive data is available on the chemical speciation of vanadium in oil ash, its solubility, mobility in groundwater, and the health effects of ingested vanadium in drinking water, the Department will take a conservative approach towards the regulation of oil ash disposal.

Interim Policy

The Department of Environmental Quality Engineering shall impose the following conditions on the disposal of oil ash generated by electric utility power plants:

1. Oil ash shall be approved for disposal only at sanitary landfills with lined active disposal areas and leachate collection systems.

2. Oil ash shall be delivered to such landfills damp to maintain compliance with the dust control provisions of 310 CMR 19.00.

3. Oil ash shall be covered with suitable cover material prior to the end of the working day to prevent fugitive emissions of vanadium pentoxide (V_2O_5) to the ambient air.

4. All approvals for oil ash disposal shall be in writing.

Oil ash, when landfilled in accordance with this policy, will require handling at the disposal site similar to residential refuse. As such, oil ash shall not be considered a special waste as defined by 310 CMR 19.00; the rubbish definition of 310 CMR 19.01 shall apply to oil ash landfilled at lined disposal areas.

Implementation

This policy is applicable to oil ash generated by electric utility power plants because of the volumes generated and the sources of oil burned. Coal ash/ oil ash mixtures generated by utility power plants, and oil ash generated by other non-household sources (e.g., universities, paper mills), shall be subject to this policy as determined by the Department on a case-by-case basis.

This interim policy is effective immediately. Modifications to the policy may occur as new data on the land disposal of oil ash becomes available. Any revisions to this policy will be so labelled. Questions on the disposal of oil ash may be directed to Mark Lyons of my staff at (617) 292-5578.

ML/gm

MEMORANDUM

TO: REE's, Deputy REE's, Division of Hazardous Waste Staff, Division of Water Pollution Control Staff

FROM: William F. Cass, Director, DHW
Thomas McMahon, Director, DWPC

DATE: March 31, 1983

SUBJECT: Policy on the Design and Operation of Sludge Landfills

Background

The Department's Sludge Disposal Policy of July 15, 1980, has classified non-hazardous sludge or sludge ash from wastewater treatment plants as "sewage" if landfilled on a site owned by a wastewater treatment facility with a valid NPDES or groundwater discharge permit. The design and operation of such a sludge-only landfill is therefore exempt from regulation under G.L. Chapter 111, Section 150A. Instead, sludge-only landfills on sites owned or controlled by treatment works with permitted wastewater discharges are subject only to the Massachusetts Clean Waters Act (G.L. Chapter 21, Sections 26-53) and G.L. Chapter 83, Section 7, which authorizes DEQE to order a sewage treatment plant to improve its works or operation in order to prevent or abate water pollution.

Such sludge-only disposal facilities are not subject to the site assignment requirements of Chapter 111, Section 150A. However, the public hearing on the land taking for a publicly owned wastewater treatment facility (as held by the Department pursuant to Chapter 83, Section 6) provides a forum comparable to a site assignment hearing. The Division of Water Pollution Control has adopted a policy which delineates the procedure for board of health participation through the Construction Grants process and the Chapter 83, Section 6 hearing (see the attached policy memo).

The Division of Hazardous Waste and the Division of Water Pollution Control recognize that sludge-only landfills present environmental threats similar to those posed by sanitary landfills. To reduce the possibility of groundwater, surface water, and air quality degradation, sludge-only landfills should be designed and operated according to standards applicable to sanitary landfills. Such conformance is required for publicly owned treatment works (POTWs) on the federal level by 40 CFR 257 (Criteria for the Classification of Solid Waste Disposal Facilities), promulgated by EPA jointly under the Resource Conservation and Recovery Act (RCRA) and the Clean Water Act. The criteria prescribe performance standards for disposal facilities which address eight broad categories of environmental and public health effects. In addition, at the state level, G.L. Chapter 21, Section 43 prohibits the discharge of pollutants to ground or surface waters without a valid permit; thus, unless a sludge disposal facility is permitted to discharge pollutants, it should be designed to control and collect leachate.

Solid waste landfills are regulated by the Department under the authority of Chapter 111, Section 150A. The current sanitary landfill regulations are being revised to conform to the RCRA criteria and to reflect present state-of-the-art. During this interim period, the Department is requiring new sanitary landfill design and operational plans to embody RCRA concepts. Similar standards should apply to sludge-only landfills on sites owned by wastewater treatment facilities in order ensure consistent environmental protection and to achieve compliance with the federal and state laws described above.

Policy

The design and operation of sludge landfills on sites owned by municipal or private wastewater treatment facilities shall conform to the RCRA standards of 40 CFR Part 257. In particular, sludge landfills shall:

1. Not cause or exacerbate flooding or surface water contamination if located within the 100 year floodplain;

2. Not cause or contribute to the taking of any endangered species;

3. Not contaminate surface waters or discharge pollutants to surface waters without a valid NPDES permit;

4. Not discharge pollutants to groundwaters without a valid subsurface discharge permit;

5. Comply with the EPA solid waste facility safety standards of 40 CFR Part 257.3-8, and;

6. Cover sludge on a daily basis with soil or other suitable cover material, unless the Department has specified in writing an alternate frequency of covering based on sludge odor and pathogen potential, or other considerations.

For the purposes of this policy, existing unlined sludge-only landfills shall be regarded as in compliance with the RCRA groundwater protection standard and the state Clean Waters Act if the sludge disposal operation is not contaminating groundwater beyond the "solid waste boundary" as defined in 40 CFR Part 257. The Department may require any existing sludge disposal operation to implement a groundwater monitoring program to determine compliance with this criterion.

The requisite frequency of cover application shall be determined by the Department on a case-by-case basis. Factors to be considered should include sludge composition/characteristics, disposal site design, disposal site location, and cover material.

The Department, when approving plans for new sludge-only landfills on sites owned by wastewater treatment works, shall require compliance with the RCRA criteria of 40 CFR Part 257. To ensure compliance with the RCRA groundwater protection standard and Section 43 of Chapter 21, new sludge landfills shall be artificially lined with natural or synthetic materials, and any leachate generated shall be collected and treated. Groundwater monitoring shall also be required by the Department if there is a hydrogeologic relationship between the disposal site and an important groundwater or surface water resource.

Implementation

Sludge landfill operations proposed as part of wastewater facility plans shall be reviewed by the appropriate regional solid/hazardous waste and water pollution control staff. A mechanism for such review is provided through the construction grants process which requires that the Regional Engineer of jurisdiction review and approve plans for a sludge landfill prior to the Division of Water Pollution Control's Step 3 Construction Grant offer for a sludge-only landfill. Sludge landfills proposed as part of a private wastewater treatment facility plans undergo a comparable review procedure.

As such, plans for the disposal of sludge on sites owned by public or private wastewater treatment works shall not be approved by the Department until regional staff have reviewed the disposal plans for consistency with this policy, and the Regional Engineer has approved the plans accordingly.

All operating sludge-only landfills subject to this policy shall be inspected for compliance with the RCRA standards as well as any plan approval or discharge permit conditions. Inspections shall be conducted by solid/hazardous waste staff or water pollution control staff cross-trained for such purpose.

Applicability

This policy is applicable to all non-hazardous sludge-only disposal facilities located on property owned or controlled by a permitted wastewater treatment plant. The disposal of waste materials other than the residues from a wastewater treatment process on a site owned or controlled by a treatment facility owner shall be subject to Chapter 111, Section 150A and 310 CMR 19.00 (the Department's sanitary landfill regulations). This policy is also not applicable to the land disposal of sludges or residues subject to regulation pursuant to 310 CMR 30.000 (The Department's Hazardous Waste Management Regulations).

Effective Date

This policy is effective immediately. Any revisions to this policy will be so labelled. Any questions on the interpretation or implementation of this policy may be referred to:

Mark Lyons
Fifi Nessen
Division of Hazardous Waste
(617) 292-5630

Ron Lyberger
Glenn Gilmore
Division of Water Pollution Control
(617) 292-5673

#12

MEMORANDUM

TO: Division Directors and Regional Environmental Engineers

FROM: Commissioner Cortese A. Cortese

DATE: August 11, 1982

SUBJECT: Sludge Disposal Policy

The following is a clarification of the Residual Policy of July 15, 1980:

1. Land application of non-hazardous sludge for beneficial purposes is not disposal and therefore not subject to C 111, S 150 A. The Department believes that the community should have input to such decisions and will seek local board of health concurrence before granting approval for a land application project.

2. Treatment and disposal of non-hazardous sludge or sludge ash on a site owned by a wastewater treatment facility is a part of the sewage treatment process and therefore falls under the statutory authority of C 21, § § 26-53, which authorizes the Division of Water Pollution Control to regulate such plants and C83, § 7, which authorizes DEQE to order a sewage treatment plant to enlarge or improve its works or change its method of operation in order to prevent or abate water pollution. Such treatment and disposal is not subject to site assignment by the board of health under C 111, S 150 A because it falls within the sewage exemption of C 111, S 150 A. The Department is nonetheless committed to providing opportunities for input to sludge disposal questions by boards of health as well as other local officials and citizens. Such opportunities occur throughout the project process beginning with facilities planning and up to the land taking. The public hearing on the land taking for a publicly owned wastewater treatment facility, held by the Department under the authority of C 83, S 6 provides a formal forum comparable to a site assignment hearing. The Division of Water Pollution Control has adopted a policy which spells out the procedure for assuring board of health participation under the Construction Grants process and through the C 83, S 6 hearing. A copy of that policy is attached to this memo.

3. Co-disposal of non-hazardous sludge or sludge ash with solid waste can only take place at a landfill which has been properly assigned by the local board of health and which has been approved by the Department. Disposal of sludge at a sanitary landfill should be authorized in accordance with Section K, 1 of The Policy and Procedure Manual for Solid Waste Program Acitvities, January 5, 1979 and as such is not considered special waste disposal:

K. DISPOSAL OF SLUDGES AT SANITARY LANDFILLS:

1. Disposal of domestic wastewater and water treatment plant sludges may be authorized at approved sanitary landfills, provided that the sludge has been dewatered to 18-20% solids concentration and that the sludge is placed on the face of the landfill, adequately mixed with incoming refuse on a daily basis or more frequently as needed. Other methods may be used provided that they are previously approved by the Department.

4. A commercial sludge-only landfill (for disposal of non-hazardous sludge or sludge ash) or commercial sludge composting facility is subject to C 111, S 150 A because it is not an integral part of a wastewater treatment facility. Consequently, it is subject to site assignment by the local board of health.

FN/pb

ANTHONY D. CORTESE Sc. D
Commissioner

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs
Department of Environmental Quality Engineering
100 Cambridge Street, Boston 02202

MEMORANDUM

TO: Division Directors: Hagg, Hannon, McCracken, Cass, McMahon, Gaskell, Delaney
Regional Environmental Engineers: Joly, Anderson, McLoughlin and Iantosca

FROM: Commissioner Cortese

SUBJECT: Residuals Policy

DATE: July 15, 1980

Attached is the Department's policy concerning the regulation of the disposal and reuse of residuals. This policy is effective immediately.

This policy represents a major change in the way DEQE has implemented and interpreted the statutes used as a basis for regulation. Essentially, all distinctions between off-site and on-site disposal are being eliminated. Disposal of non-hazardous sludge generated by a sewage treatment plant, regardless of ownership, and of non-hazardous septage will be subject to DEQE regulation, but will not require site assignment. However, before determining how these materials are to be disposed of, I want local officials to be consulted and their comments considered. The disposal of all other sludge requires site assignment.

Resource use of hazardous sludge requires a DEQE license. Resource use of non-hazardous sludge shall be regulated like all other activities involving potential pollution of air, land, or water.

Division Directors should review all pertinent regulations for consistency with this policy and report recommended or necessary revisions to me by August 30. Existing regulations will continue to be effective until the new ones are promulgated.

The determination of whether a substance is hazardous or not should follow the procedure to be set forth by the Division of Hazardous Waste. In the interim, EPA's procedure will be applicable. Questions concerning this procedure should be directed to Bill Cass.

ADC/FN/sl

ANTHONY D. CORTESE Sc. D
Commissioner

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

Department of Environmental Quality Engineering

100 Cambridge Street, Boston 02202

Residuals Disposal and Reuse Policy

July 15, 1980

The use, storage and land and water disposal of sludge will be regulated in the future as stated below. In all cases, there is no distinction between on-site and off-site disposal.

I. Authority to Regulate Disposal

The following discussion applies to sludge disposal only. Resource use of sludge is discussed separately in the next section.

As used herein, the word "disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of waste into or on any land or water so that such waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

The disposal of any sludge or ash which meets the definition of hazardous waste shall be subject to the Hazardous Waste Management Act, General Laws, Chapter 21C, and the Massachusetts Hazardous Waste Facility Siting Act, General Laws, Chapter 21D. Such disposal must be licensed by this Department pursuant to G.L. c. 21C, §7, site assigned pursuant to G.L. c. 111, §150B, and be the subject of a siting agreement pursuant to G.L. c. 21D, §12. The only exceptions are that (1) if the disposal facility was licensed by the Division of Water Pollution Control prior to November 9, 1979, such facility is fully approved to do what its license authorizes so long as the license remains in effect (Stat. 1979 c. 704, §7.), and (2) if the disposal facility was lawfully in existence on May 1, 1980, such facility need not be the subject of a siting agreement (G.L. c. 21D, §18). Any facility falling within this exception is subject only to regulation by DEQE.

Non-hazardous sludge or ash generated by a municipal or industrial sewage treatment plant should be regarded as "sewage" within the meaning of G.L. c. 111, §150A. Therefore, the disposal of such sludge and ash is not subject to G.L. c. 111, §150A. Such disposal is subject to G.L. c.21, §§26-53, which authorizes the Division of Water Pollution Control to regulate such plants and G.L. c. 83, §7, which authorizes DEQE to order a sewage treatment plant to enlarge or improve its works or change its method of operation whenever DEQE determines that such action is necessary to prevent water pollution, a source of nuisance, or creation of objectionable results in the neighborhood because of defective construction, inadequate capacity or

negligence or inefficiency in maintenance or operation or other cause. Cities and towns may not interfere with or veto the sewage treatment plant owner's compliance with the order.

The disposal of non-hazardous sludge or ash generated by a drinking water treatment plant shall be subject to G.L. c. 111, §§5G, 17 and 160, which authorize DEQE to order municipalities and persons to provide and operate such facilities, to make any improvements relative to existing facilities which DEQE deems necessary to protect public health, and take whatever other action DEQE deems necessary to ensure the delivery of a fit and pure water supply to all consumers. Whenever DEQE orders a particular drinking water treatment plant to dispose of sludge or ash at a particular location, cities and towns may not interfere with or veto the water supplier's complying with the order. Because such sludge or ash is not "sewage", DEQE should not issue such an order until the plant operator has attempted to dispose of the sludge in compliance with G.L. c. 111, §150A.

The disposal of septage shall be regulated pursuant to G.L. c. 111, §31D, which authorizes DEQE to order a city, town, or sewerage district to provide whatever facilities DEQE deems necessary for adequate and proper disposal of septage collected for hire by private persons. Cities and towns may not interfere with or veto compliance with the order. Note that DEQE can regulate voluntary action taken by cities, towns and districts pursuant to G.L. c. 83, §6, which provides that such entities may not acquire land by purchase or eminent domain for the purpose of sewage disposal without the prior approval of DEQE.

The disposal of any other sludge or ash shall be regulated pursuant to G.L. c. 111, §150A.

II. Authority to Regulate Resource Use

The following discussion applies only to actual and intended use of sludge or ash as resources. If someone is using sludge or ash in a way that cannot be legitimately described as resource utilization, such use shall be treated as disposal of waste material.

The resource use of any sludge or ash which meets the definition of hazardous waste shall be subject to General Laws, Chapter 21C, which requires the "use" of hazardous waste, as well as the "disposal" of hazardous waste, to be licensed. Such resource use shall not be subject to General Laws, Chapter 21D, or Chapter 111, Section 150B, because those statutes deal only with "disposal", not "use", of hazardous waste. If such sludge or ash is treated so that it ceases to be hazardous, the untreated sludge or ash, and the treatment process and facility, are subject to these hazardous waste laws, but the treated and therefore non-hazardous sludge or ash is not subject to these hazardous waste laws.

Sludge or ash which is not hazardous may be a pollutant. DEQE has the authority to regulate the resource use of such sludge or ash so that such resource use does not cause pollution of the environment. This authority is found in G.L. c. 21, §27(12), authorizing DWPC to promulgate regulations to prevent water pollution and protect the quality and value of water resources; G.L. c. 111, §§142A-142J, authorizing DEQE to promulgate regulations to prevent pollution or contamination of the atmosphere; G.L. c. 111, §160, authorizing

DEQE to promulgate regulations to prevent pollution and secure the protection of waters used as sources of drinking water supply, and ensuring the delivery of a fit and pure water supply to all consumers; and G.L. c. 131, §40, prohibiting alteration of a wetland in a manner which will result in pollution or adverse impact on public or private water supply, ground water supply, or certain other stated interests (note that local Conservation Commissions have a major role in enforcing G.L. c. 131, §40).

These statutes give DEQE and DWPC the authority to prevent improper resource use of sludge or ash. These statutes do not give DEQE or DWPC the authority to order the use of sludge or ash as a resource. Anyone not wishing to use sludge or ash in a manner approved by DEQE has the option of disposing of it instead, provided that such disposal is in compliance with applicable law, as indicated in the previous section.

Residuals Statutory Regulation Matrix

I Residuals Disposal

Material	Statute On Site	Statute Off Site
Sludge, sludge ash from publicly owned treatment works		
a. Non-hazardous	Ch. 21, §§26-53 Ch. 83, §7	Ch. 21, §§26-53 Ch. 83, §7
b. Hazardous	Chs. 21C, 21D Ch. 111, §150B	Chs. 21C, 21D Ch. 111, §150B
Sludge, sludge ash from privately owned domestic wastewater treatment works		
a. Non-hazardous	Ch. 21, §§26-53 Ch. 83, §7	Ch. 21, §§26-53 Ch. 83, §7
b. Hazardous	Chs. 21C, 21D Ch. 111, §150B	Chs. 21C, 21D Ch. 111, §150B
Industrial waste treatment works		
a. Non-hazardous	Ch. 21, §§26-53 Ch. 83, §7	Ch. 21, §§26-53 Ch. 83, §7
b. Hazardous	Chs. 21C, 21D Ch. 111, §150B	Chs. 21C, 21D Ch. 111, §150B
Septage	Ch. 111, §31(D)	Ch. 111, §31(D)
Water treatment plant sludges		
a. Non-hazardous	Ch. 111, §150A (Ch. 111, §5G, 17, 160, if necessary)	Ch. 111, §150A (Ch. 111, §5G, 17, 160, if necessary
b. Hazardous	Chs. 21C, 21D Ch. 111, §150B	Chs. 21C, 21D Ch. 111, §150B
Coal ash	Ch. 111, §150A	Ch. 111, §150A
Oil ash	Ch. 111, §150A	Ch. 111, §150A
Incinerator ash		
a. Non-hazardous	Ch. 111, §150A	Ch. 111, §150A
b. Hazardous	Chs. 21C, 21D Ch. 111, §150B	Chs. 21C, 21D Ch. 111, §150B
Industrial ash		
a. Non-hazardous	Ch. 111, §150A	Ch. 111, §150A
b. Hazardous	Chs. 21C, 21D Ch. 111, §150B	Chs. 21C, 21D Ch. 111, §150B

II Resource Use of Residuals

Material	Statute
Non-hazardous	
1. Sludge, sludge ash from publicly owned treatment works 2. Sludge, sludge ash from privately owned treatment works-domestic and industrial 3. Water Treatment Plant Sludge 4. Coal ash, oil ash, incinerator ash, industrial ash	Ch. 21, §27(12); Ch. 111, §§142A-142J, 160; Ch. 131, §40
5. Septage	Ch. 111, §31(D)
Hazardous - All Materials	Ch. 21C
Hazardous Material - Treatment Process to render material non-hazardous	Chs. 21C, 21D Ch. 111, §150B

ANTHONY D. CORTESE, Sc. D.
Commissioner

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs
Department of Environmental Quality Engineering
Division of Water Pollution Control
ONE Winter Street, Boston 02108

April 27, 1982

M E M O R A N D U M

TO: Thomas F. McLoughlin

THRU: Bill Cass
Thomas C. McMahon
Fifi Nessen

FROM: Steven G. Lipman

SUBJECT: DEQE Position Pager Regarding Chapter 83 Section 6 Site Hearings and Coordination with Local Boards of Health

Prior to or concurrent with the award of a Step 2 design grant for a wastewater treatment facility, a Chapter 83 Section 6 Site hearing is held if the project includes any land purchase or eminent domain proceedings necessary for the construction of any treatment, purification or disposal works. The Public Meeting Law as specified in Chapter 30A Section 11C of the Massachusetts General Laws is utilized by DEQE for this hearing process. A hearing notice is published in the local newspaper(s) at least fourteen (14) days prior to the hearing date and all abuttors are informed in writing of the time and place of the hearing. The hearing is typically held at the pertinent DEQE Regional Office with representatives from the Division of Water Pollution Control and the community's consulting engineers normally in attendance.

On June 18, 1980 Commissioner Cortese issued a Memorandum detailing the Dept's Residuals Policy. Attachments #1 & 2 are matrices for Residuals Disposal and Resource Use of Residuals excerpted from this policy document.

This policy specified that the disposal of sludge and sludge ash from a Publicly Owned Treatment Works (POTW) are regulated under Chapter 83 unless the materials are deemed to be a hazardous waste. The Mass. Health Officers Association (MHOA) has stated their disagreement with this regulatory control of sludge disposal and is of the opinion that sludge disposal is specifically included in the language of Chapter 111 Section 150A. If this interpretation were to hold it would allow ultimate veto power by the local Board of Health (BOH) over POTW's. DEQE's position is that the Dept. has a statutory obligation to prevent water pollution and to assure the proper operation and function of wastewater treatment facilities;

that sewage sludge treatment and disposal is an integral part of the wastewater treatment process and to allow a local board or agency to exercise a veto power over that facet of the treatment process would abrogate our legislative mandate. The Department believes that it was never the Legislature's intent to grant localities veto power over the sludge disposal component of a POTW, therefore the exemption of sewage from Chapter 111 Section 150A. The Legislature has clearly granted to DEQE the responsibility for siting and operating POTWs through Sections 6 and 7 of Chapter 83.

In order to mitigate MHOA's apparent concern of not having adequate input into our Chapter 83 Section 6 hearing process, the following policy actions will be immediately instituted by the Dept.

1. The local BOH and contiguous BOH, if appropriate, will be notified in writing at least 14 days prior to an 83/6 hearing and will also receive copies of site plans, project descriptions, lists of abuttors and any other information deemed pertinent to the hearing.

2. The BOH will be specifically requested to participate in the hearing process and will be given 14 days after the hearing to comment on the proposal before a decision is made by the Dept.

3. All comments received by the Dept. at the hearing will be made available to the BOH.

4. Any written comments submitted by the BOH will be answered in writing by the Dept. prior to its taking any administrative action on the 83/6 siting.

This procedure will not only be followed for all future 83/6 land taking hearings but a similar procedure will be followed if any significant modifications to an existing POTW are being proposed. This would include but not be limited to the following:

1. addition of sludge incineration
2. addition of a sludge composting facility
3. addition of a sludge landfill
4. major expansion of the physical facilities which could adversely effect abuttors.

The intent of this policy revision is to assure the BOH and abuttors a formalized vehicle for reviewing and commenting on any significant change to a POTW.

Also indicated below is a brief description of the public participation and BOH coordination that already take place during the 201 Facilities Planning Process (prior to initiation of design work).

The Construction Grants 201 Facilities-Planning process contains a formalized public participation (PP) program which includes workshops, public meetings and a public hearing. All public meetings and hearings are advertised in the appropriate local newspapers and notices are sent to all individuals and agencies included on the project mailing list. This list is developed by the community's consultant, local PP Coordinator, &/or PP Advisory Group and includes all pertinent local, regional, state and federal Boards, Agencies and commissions along with all individuals who have either expressed an interest in the project or who have attended a previous project meeting.

Based upon the Division of Water Pollution Control's review of the Facilities Plan and associated documentation, the Division prepares an Environmental Assessment (Attachment #3 are typical examples) for the recommended alternative and this document is issued by the Environmental Protection Agency with a formalized thirty (30) day review period (Attachment #4 is a copy of our typical distribution list). It should be pointed out that the local Board of Health is always sent a copy of the Environmental Assessment and contiguous Boards of Health are also copied if deemed appropriate.

MEMORANDUM.

TO: Regional Environmental Engineers
Deputy Regional Environmental Engineers for Air and Solid/Hazardous Waste
Division of Hazardous Waste Staff

FROM: William F. Cass, Director, DHW

DATE: May 18, 1983

SUBJECT: Coal Ash Landfill Cover and Disposal Policy

Introduction

The Department has received numerous requests from landfill operators and municipal officials for information on the use of coal ash as sanitary landfill cover. In addition, Regional and Boston staff have also received many inquiries concerning the proper land disposal of coal ash and the applicable laws and regulations which would govern such disposal. This memorandum outlines the Department's policy on the use and disposal of coal ash at sanitary landfill facilities.

Background

A number of major electric generating stations in Massachusetts produce substantial volumes of coal ash. Available data generated by electric utilities, universities, consulting firms, and the Electric Power Research Institute clearly demonstrates that coal ash will generally leach inorganic salts, elemental metals, sulfates, and other substances. The U.S. EPA and the Department have categorically exempted coal ash from state and federal hazardous waste regulations; as such, the land disposal of coal ash is subject in Massachusetts to G.L. Chapter 111, section 150A.

The aforementioned state solid waste disposal statute and the Department's sanitary landfill regulations establish specific procedures and requirements for the use and disposal of coal ash at sanitary landfill facilities. The attached memorandum expresses the Department's legal interpretation of G.L. Chapter 111, section 150A as it applies to coal ash.

After lengthy and careful deliberations, the Department has formulated standards for the use of coal ash as a daily and intermediate sanitary landfill cover material. The criteria go beyond those established by 310 CMR 19.00 because the intermediate cover requirements prescribed by the landfill regulations were intended to apply to impervious soils, not coal ash. Coal ash may be used as cover material at a sanitary landfill with the written approval of the Department.

Finally, the Department has determined that, although coal ash should be managed in an environmentally sound manner, the disposal of such ash at sanitary landfill facilities does not require special handling. Thus, coal ash, when delivered to a landfill for disposal, shall be classified as rubbish (see 310 CMR 19.01). All the provisions of the sanitary landfill regulations shall be applicable to coal ash disposal at sanitary landfills, including the daily cover and dust control requirements. All coal ash delivered to a sanitary landfill must be covered with soil or other DEQE approved cover material prior to the end of the working day.

Coal ash shall not be regarded as rubbish when approved by the Department for use at a sanitary landfill as cover material.

Policy

I. The Use of Coal Ash as Sanitary Landfill Cover

A. Daily Cover

1. Coal ash may be used as daily cover material at a sanitary landfill with the approval of the Department. The use of coal ash as daily sanitary landfill cover shall only be approved provided that specific measures to reliably prevent fugitive dust emissions can be implemented and included in the approval. Such measures may include, but not be limited to, covering with several inches of soil before the end of the landfill working day, or the periodic application of approved dust suppressants.

2. Approvals for the use of coal ash as daily cover shall be contingent upon site-specific variables such as facility location and elevation, physical characteristics of the ash, availability of other suitable cover material, and the past operational performance of the landfill.

3. Coal ash transported to a sanitary landfill for use as daily cover shall be delivered to the site damp. The moisture content of the ash shall be sufficient to prevent drying before application as cover, while allowing for adequate workability.

4. Written local board of health approval of a proposal to utilize coal ash as daily landfill cover shall be required by the Department prior to DEQE approval of said proposal.

5. All approvals shall be in writing.

B. Intermediate Cover

1. Coal ash may be used as intermediate cover material at a sanitary landfill with the approval of the Department. The use of coal ash as an intermediate sanitary landfill cover material shall only be approved provided that the project proponent can demonstrate that the material will attain a satisfactory saturated hydraulic conductivity (K) value. Laboratory testing shall be required for this demonstration, with documentation of testing methodologies.

2. A maximum (K) value of 1.0×10^{-5} cm/sec shall be preferred for coal ash applied as intermediate cover. Consideration may be given to material with (K) values greater than 1.0×10^{-5} cm/sec on a case-by case basis; however, the Department shall deny approval to those proposals which do not attain a maximum (K) value of 9.0×10^{-5} cm/sec.

3. Coal ash may be mixed with soil, bulking agents or other compatible material to comply with the saturated hydraulic conductivity standard. Coal ash or coal ash mixtures with (K) values greater than 1×10^{-5} cm/sec shall be applied as intermediate cover in a layer of at least two feet in thickness after compaction. This thickness is necessary to mitigate the effects of greater (K) values on the infiltration of precipitation.

4. The moisture content of coal ash spread as intermediate cover shall be between twelve (12) and twenty (20) percent liquid by weight. A moisture content within this range should optimize ash density, ash shear strength and the impervious characteristics of the material.

5. Coal ash spread as intermediate cover shall be compacted in lifts not exceeding six (6) inches. The intermediate cover layer shall be sloped to a minimum grade of between three (3) and five (5) percent to facilitate rain and snow-melt run-off and to allow for settling and subsidence. Terracing and/or other surface drainage structures shall be utilized to improve surface run-off conditions, minimize infiltration, and minimize coal ash erosion.

6. Coal ash transported to a sanitary landfill for use as intermediate cover shall be delivered to the landfill damp to maintain compliance with the dust control provisions of 310 CMR 19.00. The moisture content shall be sufficient to prevent drying before application while allowing for adequate workability.

7. Coal ash or coal ash mixtures spread as intermediate cover shall be covered with soil before the material dries in order to prevent fugitive dust emissions. A intermediate cover layer intended for use as a component of <u>final</u> cover shall be concealed with a one (1) foot layer of soil capable of supporting vegetation. The cover shall be seeded as required by 310 CMR 19.00. Coal ash shall not be approved for use as a medium to support final cover vegetation.

8. Written local board of health approval of a proposal to utilize coal ash as intermediate landfill cover shall be required by the Department prior to DEQE approval of said proposal.

9. All approvals shall be in writing.

II. Land Disposal at Sanitary Landfills

The "rubbish" definition of 310 CMR 19.01 shall be applicable to coal ash when disposal occurs at a sanitary landfill facility with a valid site assignment. All sanitary landfill facilities with valid site assignments which do not preclude coal ash disposal may receive ash for disposal; no written approval from the Department will be required. Disposal facilities approved only for specific waste streams (e.g., demolition debris or sludge-only landfills) must obtain specific written approval from the Department to dispose of ash. Moreover, if a site assignment for such a facility imposes conditions or restrictions which are inconsistent with the disposal of coal ash, the local board of health must modify the assignment prior to Departmental review of a disposal proposal.

Coal ash, when transported to a landfill for disposal, shall be delivered to the site in a damp state to achieve compliance with the dust control provisions of 310 CMR 19.00, and ash shall be covered with soil or other approved cover material prior to the end of the working day. Ash shall not remain uncovered overnight unless the landfill owner or operator has received the necessary approvals from the local board of health and the Department to use ash as daily cover material, and the dust control measures specified in the approval are implemented.

The land disposal of coal ash which yields an acidic or highly alkaline leachate remains of concern to the Department. The research literature consistently indicates that various elemental metals will solubilize more readily under acidic (i.e., less than pH 6) and extremely alkaline (i.e., greater than pH 11) conditions. In addition, the sanitary landfill environment is complex and highly variable. Many factors affect the rate of refuse decomposition and leachate generation; the biological and chemical mechanisms at work are not well understood. As such, the interaction of acidic or alkaline coal ash leachate and municipal refuse may impair refuse decomposition, affect refuse leachability, and alter landfill leachate composition. The Department may therefore impose special conditions on the disposal of coal ash which yields an acidic (less than pH 6) or highly alkaline (greater than pH 11) leachate at a sanitary landfill. Such conditions may include, but not be limited to, treatment of ash or segregated ash disposal areas.

The Department may require coal ash generators to periodically demonstrate that coal ash waste streams are landfilled in accordance with this policy. Such a demonstration shall include, at a minimum, disposal site locations, amounts of ash landfilled, and data on the pH of ash waste streams. Documentation of ash sampling protocols and laboratory analytical procedures shall be furnished to the Department. The Department shall also be notified of process modifications or revised ash management practices which alter the pH of coal ash waste streams.

III. Dedicated Coal Ash Landfills

As a matter of policy, the Department will encourage the development of properly sited, designed, and operated dedicated coal ash landfills. Such facilities would appear to be environmentally and economically attractive for a variety of reasons:

- The large volumes of coal ash generated now and in the future will compete with residential and commercial refuse for the diminishing sanitary landfill capacity in Massachusetts;

- Dedicated coals ash landfills will provide better control over ash disposal; and;

- Dedicated coal ash landfills can provide a "repository" for ash which may in the future have economic value as a resource for metals recovery.

Dedicated coal ash landfills shall be sited, designed and operated in accordance with all applicable sanitary landfill standards and criteria.

Implementation

This policy is effective immediately. Modifications to the policy may occur as additional data on the use and disposal of coal ash becomes available. Any revisions to this policy will be so labelled. Questions on this policy may be referred to Mark Lyons of my staff at 292-5578.

ML/am

ANTHONY D. CORTESE, Sc. D.
Commissioner

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs
Department of Environmental Quality Engineering
One Winter Street, Boston 02108
OFFICE OF GENERAL COUNSEL, 9TH FLOOR, TELEPHONE 292-5568

MEMORANDUM

TO: William Cass

THRU: Willard R. Pope

FROM: Tom Powers

DATE: October 14, 1982

RE: Site Assignments for Coal Ash.

One of the results of the September 16 meeting on Department policy regarding disposal and use of coal ash was a request that I produce a Memorandum discussing the site assignment requirements for coal ash.

Section 150A of Chapter 111 of the Massachusetts General Laws establishes a comprehensive process for regulation of sanitary landfills. First, the location or site of a proposed sanitary landfill must be approved ("assigned") by the local board of health. The question at this stage should be one of the appropriateness of the location to support a sanitary landfill, and the statute provides for a public hearing on the issue prior to the decision. The actual operation of the landfill and the environmental effects of it, however, are regulated by this Department under its authority, also specified in §150A, to approve the plans for a landfill once the location has been assigned by the board of health.

In 1976 a paragraph pertaining specifically to coal ash was added to §150A. The paragraph provides:

> Ash produced from the combustion of coal, including but not limited to fly ash and bottom ash, shall not be construed as refuse, rubbish, garbage, or waste material under this section when used as a raw material for concrete block manufacture, aggregate fill, base for road construction, or other commercial or industrial purpose, or stored for such use. A location where such use or storage takes place may be constructed, established, maintained, and operated without being construed as a facility or site for a facility under this section, and no assignment or approval from the board of health or the department

shall be required for such construction, establishment, maintenance, or operation; provided, however, the department shall have jurisdiction to determine, after notice and hearing, that the establishment or operation of such a location has created a nuisance condition by reason of odor, dust, fires, smoke, the breeding or harboring of rodents, flies or vermin, or other causes, and to prevent or order abatement thereof; and provided, further, that no final disposal of ash produced by the combustion of coal may be accomplished by burial of such ash in the ground, other than as base for road construction or fill, unless the place where such disposal takes place has been assigned for such disposal by the board of health and plans for such disposal have been approved by the department pursuant to this section. The department may waive the requirements of the preceding paragraphs of this section and the application of any regulations, or portions thereof, promulgated under the preceding paragraphs of this section as they may apply to the disposal by burial of ash produced by the burning of coal, and shall review and may approve the plans, site and method of storage upon a determination that no nuisance is created and damage to the environment is minimal. Use of ash produced from the combustion of coal as intermediate cover material over rubbish at sanitary landfill facilities may be permitted by assignment of the board of health with approval of the department under this section.

The final portion of the lengthy second sentence of the paragraph quoted above makes clear that no final disposal of ash by burial may take place unless the place where such disposal occurs has been assigned for such disposal by the board of health and the Department has approved the plans. The sentence is ambiguous, however, as to whether a specific site assignment for coal ash is required, or whether an existing general site assignment for a sanitary landfill is sufficient. Although the matter is not entirely free from doubt, I would interpret the language to permit disposal of coal ash at an existing properly assigned sanitary landfill, so long as the assignment does not impose conditions or restrictions which are inconsistent with the disposal of coal ash.

I reach this conclusion not only by examining the admittedly rather ambiguous words of the sentence, but in addition considering the purpose of the site assignment and plan approval process generally. As noted above, site assignment has traditionally been a decision by a local body (the board of health) as to the appropriateness of the area for a particular purpose - a sanitary landfill. Once that land-use type of decision has been made for a location, it is hard to see why the Legislature would have intended that it be made again specifically for the disposal of coal ash, since I understand from the Department's technical people that the disposal of coal ash presents no significantly different or greater environmental problems than do other types of refuse which are commonly disposed of in sanitary landfills.

It must be conceded that the question here is a close one, since the words "for such disposal" in the sentence could be interpreted to require a new site assignment specially pertaining to the disposal of coal ash. Nevertheless, I believe that my conclusion outlined above is the correct one, both because it better comports with the logic of the site assignment process as a whole and for public policy reasons. It seems unlikely that the legislature would have intended to make it more difficult to dispose of coal ash(which requiring an additional site assignment certainly would do)at the same time that the rest of the coal-ash section was expanding the amount of flexibility applicable to coal ash use (i.e. providing for its use as a commercial or industrial material, or as intermediate cover). It is entirely consistent with the language of the section to conclude that the legislature was providing for use of the ash in various ways without any assignment, but wanted to insure that if the ash was disposed of by burial, it would have to meet the minimum requirement of going to an assigned location - not simply anywhere convenient for the owner of the ash.

The use of ash as intermediate cover material, however, (as provided for in the final sentence of the section) is another matter altogher. In my judgment that sentence requires a specific site assignment for coal ash as cover, beyond the existing site assignment for the sanitary landfill facility. If that were not the correct result, there would be no reason for the sentence at all.

Assuming then that a site assignment specifically pertaining to coal ash as intermediate cover material is required before coal ash may be used as cover at an existing sanitary landfill, must the proposed site assignment be the subject of a public hearing? Since there are no specific words requiring such a hearing, I conclude that the answer is "No," although I believe that the questions is a fairly close one.

As discussed above, the general language which establishes the site assignment process requires that a public hearing precede the assigning of any location as a site for a facility. It could be argued that, in requiring an assignment for the use of coal ash as intermediate cover, but not repeating the language "after a public hearing," the legislature was simply making a shorthand reference to a site assignment process which inherently includes a public hearing. However, I believe it more consistent with the site assignment concept to consider that the Legislature was really interested in requiring simple board of health <u>approval</u> for the use of coal ash as intermediate cover, rather than <u>requiring</u> the full, formal site assignment process. As noted earlier, the question of whether to grant a site assignment is generally one of the suitability of an area for the particular purpose. When the area has already been assigned, the specific <u>use</u> of one material (coal ash) as cover would not seem to involve the same kinds of questions as the inital assignment, and therefore should not involve the full site assignment process. The sentence should be read as written, with the conclusion that the legislature intentionally omitted the words "after a public hearing" following the phrase "assignment of the board of health."

Obviously, a board of health <u>may</u> require a public hearing on the issue of coal ash as intermediate cover if it chooses to do so; nothing precludes that. In addition, the meeting at which a board

of health decides to grant a site assignment is subject to the open-meeting law (G. L. c. 39, §23A-C) and therefore must be open to the public and advertised at least 48 hours in advance. However, the Department should not require that a public hearing has been held on the specific issue of coal ash to be used as intermediate cover before reviewing and approving the plans for such use.

The Department is currently examining the environmental effects and problems associated with the disposal of coal ash and its use as intermediate cover. From conversations with members of the Department I understand that it appears at this time that strict enforcement of existing regulations pertaining to sanitary landfills may be sufficient bo deal with any problems of coal ash disposal which differ from those associated with disposal of other types of solid waste - in particular, wind-blown particulates. Problems associated with the use of coal ash as intermediate cover are clearly within the Department's jurisdiction to control, since we have the authority and the obligation to review plans (and, therefore, to impose necessary conditions) after a site assignment for the use of coal ash as intermediate cover has been granted by the board of health.

I see no advantage legally to classifying coal ash as a "special waste." If, in the future, new information convinces us that we should regulate the disposal of coal ash at existing sanitary landfills more carefully, I suggest that we should amend the sanitary landfill regulations by adding a provision requiring our approval of plans prior to disposal of such ash.

cc: William St. Hilaire
Thomas McLoughlin
Ken Hagg
Mark Lyons

MEMORANDUM

TO: DHW Staff

FROM: William F. Cass

DATE: May 20, 1983

SUBJECT: DHW Policy on Hazardous Waste Transporter Training Programs

Background Information

Companies which are licensed to transport hazardous waste in Massachusetts must train their drivers to safely handle the wastes they haul. This training must meet the criteria set by regulation, and may be given by in-house professional staff when training competence exists or be obtained through outside consulting services. It must be submitted along with the rest of a transporter's license application.

The Licensing Branch has received outlines from various consulting companies offering general training programs to transporters. These consultants are requesting the Department's "approval" of their course outlines.

State agencies are unable to endorse or recommend private companies to the regulated community. Moreover, the Department cannot approve course outlines because additional information must accompany the outline when it is submitted by an applicant. Which employees receive basic training, which employees receive more advanced training, how many hours are devoted to initial and follow-up training are all important information which must be submitted by each individual applicant.

Therefore, the Department cannot give a blanket endorsement to a consultant's marketed training program. However, the Department can provide a policy of what constitutes an acceptable course. The training program submitted by a transporter/applicant will be reviewed using this criteria and approved on a case-by-case basis at the time an application is submitted.

Policy

The hazardous waste transportation regulations provide that, at a minimum, an employee must be trained in the following areas:

- basic knowledge of DOT labeling, packaging, placarding and shipping requirements.
- manifest requirements.
- safe vehicle operations.

- basic knowledge of wastes handled and of safe hazardous waste handling procedures.

- familiarity with the DOT Emergency Response Guide.

- Emergency Medical Procedures and safety procedures.

- Emergency Procedures for preventing/containing spill, explosion or fire; how clean-up will occur; and the spill notification requirements in Massachusetts.

The training program must also include provisions for providing periodic review for employees and initial training for new employees.

One state agency, the Massachusetts Department of Education's Firefighting Academy, offers a program which covers these requirements.

It is the applicant's responsibility, regardless of which consultant, if any, is chosen, to show what training will be provided and how this training program will be implemented, i.e., programs for new employees, number of hours of initial training, follow-up training sessions, etc. If the applicant chooses an outside firm to provide employee training, the applicant must provide a detailed course description which includes training in Massachusetts regulations and the aforementioned specifics of training program.

SFC/LB/am

MEMORANDUM

TO: Division Staff, REEs, DREEs, Affected Parties

FROM: William F. Cass, Director, Division of Hazardous Waste

DATE: November 4, 1983

SUBJECT: Revised Interim policy for licensing spill clean-up contractors

Over the years, several licensed hazardous waste transporters have been granted authority in their transport license to engage in spill clean-up activities. This authority has been granted on a fairly ad-hoc, informal basis; there are no written standards or qualifications.

The Licensing and Engineering Branch is in the process of developing draft policies and procedures concerning the licensing of spill clean-up contractors. (These will be distributed to you for review and comment.) Specifically, the policies will define what activities require a clean-up license, what standards must be met by applicants in order to receive a license, and what adminstrative process is appropriate to review and evaluate spill clean-up license applications.

Meanwhile, the Division is in the process of re-licensing all hazardous waste transporters. The issue before the Licensing and Engineering Branch is how to proceed in the licensing of spill clean-up contractors, including applicants who already have such authority and those who do not have such authority currently, but who have applied for it.

Proposed Interim Policy

The rationale behind this proposed policy is simply that, in the absence of criteria and standards for spill clean-up licensing, it would violate due process and standards for fairness to discriminate between those who already have such authority and those who do not. As mentioned previously, those who already have spill clean-up authority were given that authority in the absence of standards and criteria. To allow them to continue, while denying such authority to those who may be as well qualified but do not happen to have that authority already, is simply not supportable.

On the other hand, denying all applicants such authority would create a state of chaos and confusion. Therefore, the following four part interim policy is adopted:

1. Those hazardous waste transport license applicants who already have emergency spill clean-up authority will continue to be granted such authority, provided that they have a satisfactory record. Comments will be solicited from OIR and the regions.

2. Those hazardous waste transport applicants who do not now have emergency spill clean-up authority, but have applied for it will be granted such authority provided they submit documentation indicating they have satisfactory experience and equipment, and provided that their record is otherwise satisfactory. Comments will be solicited from OIR and the regions and from other states in which the applicant may have operated.

3. All persons given spill clean-up authority will be notified in writing that the whole question is under review and that their spill clean-up authority is provisional. (See copy of letter attached.)

   (Note: Spill clean-up licenses will only be for materials which the applicant is allowed to transport.)

4. No license is required for those activities that (1) require Department approval or that are ordered by the Department and (2) are performed by a contractor authorized by the Department to secure a site where hazardous waste has been deposited or abandoned (See 310 CMR 30.801(ii)). However, the transport of waste off-site does require a licensed transporter.

LB/am

TO: DHW Staff

FROM: William F. Cass

DATE: April 12, 1984

SUBJECT: DHW Policy on Waste Classification

Background Information

The Massachusetts Hazardous Waste Regulations (310 CMR 30.302) require that any person who generates a waste must determine if that waste is a hazardous waste....as follows:

> "(1) First, determine whether his waste is excluded from regulation pursuant to 310 CMR 30.104;
>
> (2) Next, determine if the waste is listed as a hazardous waste in 310 CMR 30.130 through 30.136;
>
> (3) If the waste is not listed as a hazardous waste in 310 CMR 30.130 through 30.136, determine whether the waste is hazardous waste pursuant to 310 CMR 30.120 through 30.125 by doing either of the following:
>
> > (a) Testing the waste according to the methods set forth in 310 CMR 30.151 through 30.155 or according to an equivalent method approved by the Administrator of EPA pursuant to 40 CFR Section 260.21 and by the Department.
> >
> > (b) Applying knowledge of the hazardous characteristics of the waste in light of the materials or the process used."

However, generators, interim status facilities, licensees, municipalities and consultants frequently call the Department requesting an answer to the question, "Is my waste hazardous?". The same questions may be asked of EPA staff, DEQE regional staff and various Branches of Boston's Division of Hazardous Waste. The Department should respond to valid requests for assistance in making these judgements.

In implementing this policy, the Department will have a consistent approach to making these determinations and to ensure consistency in the answers to similar questions.

Policy

All requests involving waste classification should be presented in writing to the Department (except when an inspector reviews data in the field which clearly shows a waste is not hazardous i.e., not a listed waste, has no hazardous characteristics except metals found in concentrations less than the EP toxicity levels). The request should identify:

- o name of analytical laboratory and certification program the laboratory participates in;
- o sampling and analytical techniques with method number/reference cited;
- o Quality Assurance/Quality Control (QA/QC) information including actual standards used, spiking, duplicates;
- o analytical results including calculations if necessary;
- o description of process generating the waste;
- o waste volume per unit time; and
- o typical characteristics of waste if at any time, other hazardous material/waste could be present or anticipated (i.e., consistency of composition).

The Boston Office of the Division of Hazardous Waste will maintain two (or more) three-ring binders on waste classification. The first will include general, background information to be used as the basis or support for a waste classification decision. The second will document "historical" waste classification decisions made by the DEQE or the EPA.

The binders will be organized as follows:

I. General Reference File regarding Waste Classification (includes any data available on categories or specific types of wastes).

A. Where to locate documents or information (i.e., DHW, L & E, LJB) or a copy of the information.

B. Information available

1. Type of waste (i.e., tannery waste) and EPA waste code.

2. Reference of original source of information (i.e., EPA listing document).

C. Date of latest information (i.e., 1980 document).

This binder(s) will be filed alphabetically by type of waste. Currently, information is on file for tannery waste, infectious waste and nuclear by-product waste.

The second binder is organized by the following types of waste:

II. Historical, Specific Waste Classification Information

- A. Batteries
- B. Characteristic Waste
- C. Foundry Waste
- E. Ink Waste
- F. Miscellaneous Liquid Wastes
- G. Miscellaneous Solid Waste/Sludges
- H. Oil Contaminated Wastes
- I. Paint or Pigment Residue/Waste
- J. Photographic Wastes
- K. Plating Wastes
- L. Polymers

A log will be maintained which will include name of industry, address, date of determination, agency person to contact, specific source or type of waste.

All written determinations made by agency personnel should be sent to the Licensing and Engineering Branch (Attn: Chief Clerk) along with a copy of the company's request and a copy of the laboratory data. Maintaining this filing system will ensure: knowledge of similar previous determinations, consistency in format and easy data retrieval.

Implementation

This waste classification system has been established for determinations made to date. It will be continuously updated as copies of determinations or general reference information is sent in and filed.

MEMORANDUM

TO: Division Staff, REE's, Deputy REE's for Air and Hazardous Waste Programs

FROM: William F. Cass, Director, DHW

DATE: September 4, 1984

SUBJECT: CHANGE OF STATUS OF GENERATORS AND FACILITIES REVISED POLICY (for implementation August - December, 1984)

Background

With the receipt of the Annual Report form for 1983, many companies which notified as Generators recognized that they did not generate the volume of waste (1,000 kg or more/month) which qualified them as Large Quantity Generators. The explanation for this may be in part due to the fact that the federal notification form did not provide a designation for a Small Quantity Generator status. Other companies may have filed protectively. With the influx of change of status requests from Generators in 1984, we have an unusual burden of inspections in the Regions. We will be reviewing this revised policy in 1985 after several months of implementation of the new Massachusetts notification form because we anticipate a reduction in the number of change of status requests.

Recent discussions with the Regional offices indicate that they would like to continue to inspect those companies requesting to be deleted from the regulated community. Those requesting a change from Generator to Small Quantity Generator would have a lower priority on the inspection schedule.

Policy

Therefore, in order to (1) meet the Regional goal of inspecting all existing Generators which have requested to be deleted from the regulated community and (2) to accomplish all requested changes of status prior to the end of calendar year 1984, when companies need clarification of whether they must file an Annual Report for 1984, the following procedures for change of status are adopted:

1. Companies requesting a change of status from Generator to Small Quantity Generator will be allowed to certify that they are acting as a Small Quantity Generator. (see attached Statement #1) Listings of such requests will be sent to each Regional office for review. Unless the Regional office requests time for an inspection, the change will be made administratively by the Boston office and processed by EPA without an inspection.
   Note: The Region may at any time prior to or after the certification inspect to verify the status of the company.

2. Companies requesting a change of status from Generator to Deletion from the system will be allowed to certify (see attached Statement #2) that they are not generating waste of 20 kg or more in a month. Listings of such requests will be sent to each Regional office and the change will not be made until approval has been received from the Region. Should the Region be unable to inspect such companies prior to November 30, 1984, the change of status will be processed, based on the

certification, and the Region may inspect the company at a later time to verify its status. Appropriate enforcement action may be taken for companies found to be in violation of their certification statement.

Note: The November 30 deadline is set to allow processing and confirmation by letter from EPA no later than December 31, thus exempting the company from filing a 1984 Annual Report.

3. Companies requesting a change of status to Deletion due to a move will require a Regional inspection. The Regions should consider this the highest priority of the three types of change of status inspections mentioned above.

4. The current policy which requires a Regional inspection prior to approval of any Treatment, Storage or Disposal Facility change of status will remain in effect.

WFC/NW/am

S. Russell Sylva
Commissioner

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

Department of Environmental Quality Engineering

Division of Hazardous Waste

One Winter Street, Boston, Mass. 02108

MEMORANDUM

TO: Deputies, Program Managers, DREE's, Hazardous Waste Advisory Committee

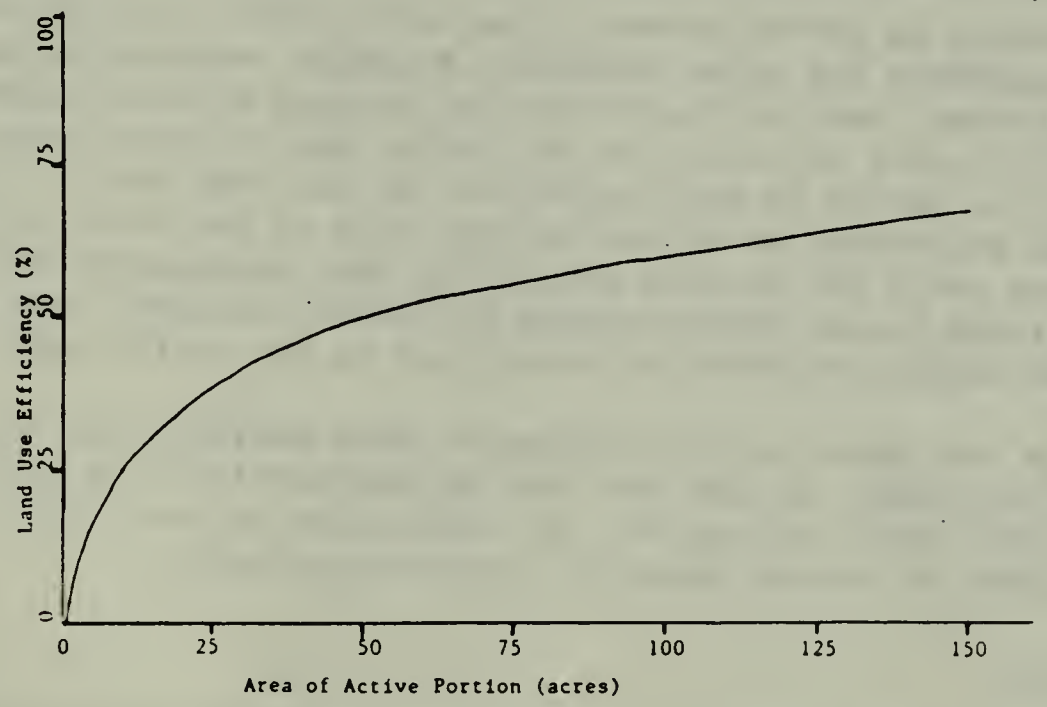
FROM: William F. Cass, Director, DHW

DATE: November 6, 1984

SUBJECT: Policy for the Interpretation of "Active Portion" in Special Locational Standards for Ignitable and Reactive Wastes

Introduction

It has been pointed out by designers of recycling facilities for ignitable wastes that the requirement of a buffer zone of 300 feet severely biases the effect of the regulation to favor large facilities. The figure below plots land use efficiency (ratio of active portion to total site) for active portions of a range of sizes. It is clear that this penalises facilities whose active portions are less than 25 acres in size.



Background

The location standards for ignitable and reactive wastes 310 CMR 30.705(4) specifies a distance from the active portion of the facility to the property line of 300 feet; with the proviso that the Department may approve a lesser distance if that is sufficient to protect the public health, safety and welfare. This judgement is to be made based on information provided in

the license application. It also provides that the Department may require a greater distance if that is required by particular siting factors. In no case is the buffer zone to be less than that required by 310 CMR 30.688 and 30.697 for storage of ignitables and reactives, which is typically 15 meters (50 feet). This minimum distance is based on the equivalent federal regulation under RCRA, so it should be noted that the EPA is presently proposing to amend their regulation to allow for lesser distances when this is consistent with the recommendations of the National Fire Protection Association.

The distance of 300 feet in 310 CMR 30.705(4) is a compromise selected by Hazardous Waste Advisory Committee to assure that there will be a sufficient buffer zone around those facilities which involve distillation or other treatment of ignitables and reactives, and which are presumed to be a greater fire hazard than passive storage. The provision to increase this distance would provide for any additional buffer zone needed for the treatment before disposal of such explosive materials as nitrated organics, picric acid or ethers which have developed peroxides during storage. The provision for reducing the buffer zone would allow the Department to follow the recommendations of the National Fire Protection Association when those were applicable.

To the extent that the buffer zone is based on the NFPA recommendations and the state fire code, 527 CMR 9.00, the final approved design of a facility for treatment of ignitable and reactive wastes would be expected to be less biased toward large facilities than would be implied by the regulation as it is stated. This, however, cannot be determined until an actual license application is submitted for approval; which means that the designers of such facilities must use the 300 foot distance as a given parameter in the design.

It should be noted, however, that the buffer zone was not intended to be unuseable for other purposes. Roadways, employee parking areas, office facilities, service facilities and storage of non-flammable materials could clearly be placed in the buffer zone without being inconsistent with the intent of the regulation. On the contrary, to require that these structures be placed in proximity to the areas of higher fire hazard would not be good design for fire protection. This intent can be clarified by an interpretation of "active portion" that clearly identifies those activities that can take place in the buffer zone.

It is the intent of this policy to make explicit the interpretation of 310 CMR 705(4) to say that the "active portion", as that term is used in 310 CMR 705(4) refers only to those units of the facility that are used to treat or manage ignitable or reactive wastes.

Policy

When the word "waste" is used in the definition of "active portion" as given in 310 CMR 30.010 it shall, for the purposes of location considerations per 310 CMR 30.705(4) only, be considered to mean "wastes which are ignitable per 310 CMR 30.122(1) or reactive per 310 CMR 30.124(1)".

This policy shall in no way limit the Department's ability to require a greater or allow a lesser distance between the active portion and the property line when that is required by public health, safety or welfare; nor shall it be taken to limit the subject of buffer zones as an item for negotiation in a siting process pursuant to MGL c. 21D.

Implementation

This policy is effective immediately. Designers of facilities for the management of ignitable or reactive wastes wishing additional clarification or other assistance in applying this policy or other regulations may call Dr. Karl Eklund of the Regulatory/Policy Task Force at (617) 292-5582.